

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Messsaoud Benantar		
Assignee:	International Business Machines Corporation		
Title:	Method and System for Network Single Sign-on Using a Public Key Certificate and an Associated Attribute Certificate		
Serial No.:	09/821,064	Filing Date:	March 29, 2001
Examiner:	Christopher J. Brown	Group Art Unit:	2134
Docket No.:	AUS920010140US1	Customer No.	65362

Austin, Texas
May 5, 2008

FILED ELECTRONICALLY

REPLY BRIEF UNDER 37 CFR § 41.41

Dear Sir:

Applicant submits this Reply Brief in reply to the Examiner's Answer mailed in this case on March 3, 2008. It is believed that no fees are due in connection with the filing of this Reply Brief, however, the Commissioner is authorized to deduct any amounts required for this Reply Brief and to credit any amounts overpaid to Deposit Account. No. 09-0447.

A. Claim 9 Has Not Been Rejected Over Any Prior Art, And Therefore Claims 9-10 Should Be Allowed

As stated in the "Status of Amendments" section of Applicant's Appeal Brief, Applicant "notes that claim 9 has not been rejected over the cited references, and therefore requests that a notice of allowability be issued for at least claim 9 and claim 10 (which depends from claim 9)." In the Examiner's Answer, the Examiner stated that "The appellant's statement of the status of amendments after final rejection contained in the brief is correct." Examiner's Answer, p. 2. In the absence of any showing that the requirements of claim 9 are disclosed in the prior art, Applicant requests that a notice of allowability be issued for at least claim 9 and claim 10 (which depends from claim 9).

B. Claims 1-8 and 11-26 Are Not Obvious And Should Be Allowed

In response to Applicant's arguments concerning independent claims 1, 11, and 19, the Examiner asserts that "The appellant argues with regards to the specification, but it is noted that

the features upon which applicant relies are not recited in the rejected claim(s).” Examiner’s Answer, p. 6. With all due respect, this assertion is not correct. In particular, Applicant has appealed the obviousness rejection of claims 1, 3, 11, 13, 19 and 21 because none of the cited art references, taken singly or in combination, discloses using a single sign-on (SSO) agent to not only (1) authenticate a user in response to an initial authentication request by obtaining or retrieving an attribute certificate having authentication data for the user, but also to (2) authenticate the user for subsequent authentication requests made by the SSO agent by using authentication data contained within the attribute certificate, as variously recited in claims 1, 11 and 19. *See, e.g.*, claim 1 (“authenticating the user at the SSO agent for the initial authentication request; retrieving by the SSO agent an attribute certificate associated with the user; and authenticating the user for subsequent authentication requests via the SSO agent using authentication data within the attribute certificate.”) (emphasis added). As set forth below, the centrality of the SSO agent to the initial and subsequent authentication requests is explicitly recited in the independent claims:

Claim 1: A method for an authentication process within a data processing system, the method comprising:

- receiving at a single sign-on (SSO) agent an initial authentication request for a user;
- authenticating the user at the SSO agent** for the initial authentication request;
- retrieving by the SSO agent an attribute certificate associated with the user; and
- authenticating the user for subsequent authentication requests via the SSO agent** using authentication data within the attribute certificate.

Claim 11: An apparatus for an authentication process within a data processing system, the apparatus comprising:

- means for receiving at a single sign-on (SSO) agent an initial authentication request for a user;
- means for authenticating the user at the SSO agent** for the initial authentication request;
- means for retrieving by the SSO agent an attribute certificate associated with the user; and
- means for authenticating the user for subsequent authentication requests via the SSO agent** using authentication data within the attribute certificate.

Claim 19: A computer program product in a computer-readable medium for use in a data processing system for an authentication process, the computer program product comprising:

instructions for receiving at a single sign-on (SSO) agent an initial authentication request for a user;

instructions for authenticating the user at the SSO agent for the initial authentication request;

instructions for retrieving by the SSO agent an attribute certificate associated with the user; and

instructions for authenticating the user for subsequent authentication requests via the SSO agent using authentication data within the attribute certificate.

After acknowledging Appellants' argument that the claimed SSO agent uses an attribute certificate in an initial and subsequent authentication, the Examiner asserts that he has "interpreted the independent claims 1, 11, and 19, and Wood in a different manner than the appellant." Examiner's Answer, p. 6. If the Examiner's "interpretation" ignores the express claim requirements set forth above, then the interpretation is in error. "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention," and is determined by considering, *inter alia*, "the language of the claims to determine what 'the applicant regards as his invention.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313, 75 USPQ2d 1321, 1326 (Fed. Cir. 2005).

As for the "interpretation" of the Woods disclosure, the Examiner asserts that "Wood also teaches that the user may have to be authenticated an initial and subsequent time," citing Wood, col. 6, lines 1-10. Examiner's Answer, pp. 6-7. As seen from the quote of the cited passage below, there is simply no way that the cited passage supports the Examiner's assertion:

If the entity requesting access has not yet been authenticated to the trust level required for the particular access to the particular enterprise application or information resource requested, authorization component 140 may indicate that the access request is to be redirected to login component 120 so that login credentials may be obtained and authenticated to a particular trust level.

Woods Patent, col. 6, lines 4-10. **Indeed, the very next sentence from Wood confirms that, once login credentials are obtained for a user, "the access will typically be allowed without the need for further login credentials and authentication."** Wood Patent, col. 6, lines 10-16. Thus, there are no "subsequent authentication requests" in the Wood scheme, much less

“authenticating the user for subsequent authentication requests via the SSO agent using authentication data” as claimed.

In the Appeal Brief, Applicant points out that this deficiency is not remedied by Parker’s disclosure of a system where the user (and not an SSO) is issued an attribute certificate. In response, the Examiner asserts that “this is irrelevant as Parker is not relied on for its authentication framework, only its explicit teaching of the attribute certificate.” Examiner’s Answer, p. 7. With all due respect, it is not “irrelevant” to point out that the deficiency of the Wood reference is not remedied by the disclosure of the Parker reference, nor is it “irrelevant” to point out that proposed combination “teaches away” from the claimed invention, nor is it “irrelevant” to point out that the Examiner’s proposed combination of references would change the principle of operation of the prior art invention being modified. *See*, MPEP § 2144.05(III) (“A *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention.”) and MPEP, § 2143.01(VI) (“If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.”).

For at least the foregoing reasons, Applicant respectfully submits that a *prima facie* case of obviousness has not been established because neither Wood nor Parker (nor any of the other cited references) disclose or suggest using an SSO agent to both (1) authenticate a user in response to an initial authentication request, and to (2) authenticate the user for subsequent authentication requests using authentication data from an attribute certificate that is retrieved the SSO agent. Accordingly, claims 1, 11 and 19 are allowable. To the extent that dependent claims 3-8 and 12-26 each respectively incorporate the requirements of independent claims 1, 11 and 19, these dependent claims are likewise allowable, even though there are additional differences recited in the dependent claims. Accordingly, requests that the obviousness rejections of claims 1-8 and 11-26 be withdrawn and that the claims be allowed

CONCLUSION

A *prima facie* case of obviousness has not been established because none of the cited references discloses Applicant’s use of an SSO agent for authenticating a user for an initial and subsequent authentication requests using authentication data from an attribute certificate

obtained by the SSO agent. In view of the above arguments, it is respectfully urged that the rejection of the claims should not be sustained.

For the above reasons, Applicant respectfully submits that the Examiner's rejections of claims 1-26 are unfounded and should be reversed.

FILED ELECTRONICALLY
May 5, 2008

Respectfully submitted,

/Michael Rocco Cannatti/

Michael Rocco Cannatti
Attorney for Applicant
Reg. No. 34,791